

February 5, 2014



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 10776  
(ELEVENTH REVISION)

EXPIRATION DATE: December 31, 2017

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: P.S.I. Plus, Inc.  
East Hampton, CT
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the manufacture, marking, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT Specification 3E cylinder, except as specified herein, for the transportation in commerce of the hazardous materials described in paragraph 6 below. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302a(a)(1) and 173.304a(a)(1) in that a non-DOT specification cylinder is not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of P.S.I. Plus, Inc. dated December 4, 2013, submitted in accordance with § 107.109.

**February 5, 2014**6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Material Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Carbon dioxide	2.2	UN1013	N/A
Division 2.1 and 2.2 gases authorized in DOT Specification 39 cylinders	2.1 or 2.2, as appropriate	as appropriate	N/A
Ethylene, compressed	2.1	UN1962	N/A
Oxygen, compressed	2.2	UN1072	N/A
Refrigerant gases--the proper shipping name listed in the hazardous materials table in 49 CFR § 172.101	2.2*	as appropriate	as appropriate

\*No Division 2.3 refrigerant gases are authorized.

7. SAFETY CONTROL MEASURES: Prescribed packaging is a non-DOT specification cylinder made in conformance with the requirements for a DOT Specification 3E cylinder under §§ 178.35 and 178.42 except as follows:

§ 178.42(a) *Type, size and service pressure*

Seamless tubing or Drawn Over Mandrel (D.O.M.) tubing partially closed in at either end with closure on either end by circumferentially welded end caps. Cylinder not over 90 cubic inch water capacity with service pressure of 1800 pounds per square inch. Cylinder outside diameter must not be over 4.5 inches.

§ 178.42(b) *Steel*

(i) Aluminum killed 1010 seamless tubing of uniform quality. Content percent for the following not over: Carbon 0.12, manganese 0.50, phosphorus 0.04, and sulfur 0.05 (ladle analysis), or

(ii) Cold drawn seamless type 4130 alloy tubing. Content percent for the following not over: Carbon 0.35, manganese 0.90, phosphorus 0.04, sulfur 0.05, silicon 0.35, chromium 1.10, and molybdenum 0.25, or

(iii) Drawn Over Mandrel (D.O.M.) 1010 or 4130 type steel tubing made to meet ASTM Specification A513 - Type 5. The D.O.M. steel tubing must be fully annealed/normalized after welding and before being drawn over the mandrel. The tubing must be stress relieved after drawing.

§ 178.42(d) *Manufacture* - The last sentence is deleted.

§ 178.42(f)(2) *Hydrostatic test*

The cylinder referred to in paragraph (f) (1) of this section must burst at a pressure higher than 6,000 psig without fragmenting or otherwise showing lack of ductility, and one additional cylinder in the same lot of 500 must be subjected to a 3,000 psi test and subsequently to a flattening test between knife edges with the circumferential joint at a right angle to the plates. The knife edges shall be 60° wedge shaped rounded to ½ inch radii. Flattening to six times the thickness of the seam joint without cracking is required. The last sentence on changes in the inspector's report is deleted.

§ 178.42(f)(3) Other cylinders must be examined under hydrostatic pressure of at least 3,000 psig and show no distortion or indication of defects. The pressure must be maintained for at least 30 seconds and sufficiently longer to ensure complete examination.

§ 178.42(g) *Leakage test*

All cylinders must be tested for leakage by internal air or gas at 1,800 psig following the hydrostatic test. Leakers must be rejected.

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§ 178.42(i)      *Marking* - Marking applies but substitute  
"DOT-SP 10776" for "DOT 3E" in the marking.

8.    SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. Charging of cylinders with liquefied gases must meet requirements in § 173.304a.

g. Each cylinder must be secured against rotational movement within the overpack. Cylinders must be shipped in strong outside packaging complying with § 173.301(a)(9).

h. Transportation of Division 2.1 (flammable gases) are not authorized aboard cargo vessel or aircraft unless specifically authorized in the Hazardous Materials Table (§ 172.101).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft. (See restriction in paragraph 8.h).
10. MODAL REQUIREMENTS:
- a. A current copy of this special permit must be carried aboard each vessel and aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
  - b. Ethylene and chlorflourocarbons classed as flammable gases are forbidden for shipment by passenger-carrying aircraft.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq.
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Dr. Magdy El-Sibaie  
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: CWF/SGrey